REMARKS

Thorough examination and careful review of the application by the Examiner is noted and appreciated.

Claims 1-3, 5-12 and 21-28 are pending in the application. Claims 1-3, 5-12 and 21-28 stand rejected.

Claim Rejections Under 35 USC §102

Claims 1-3, 5, 7-9 and 12 are rejected under 35 USC §102(e) as being anticipated by Deguchi '091. It is contended that Deguchi discloses a field emission display panel including the feature that the width of the nanotube layer is less than 3/4 the width of the first electrically conductive material, as shown in Deguchi's Fig. 1A.

The rejection of claims 1-3, 5, 7-9 and 12 under 35 USC §102(e) based on Deguchi is respectfully traversed.

Deguchi discloses an electron emission element and image output device including a substrate, a cathode formed on the substrate, an anode opposed to the cathode, an electron emission member disposed on the cathode, and a control electrode disposed

between the cathode and the anode. (See Abstract) The electron emission member 14, as specifically described at col. 5, line 36, as:

> "The electron emission member 14 is **formed as a circular thin film** for example, as shown in Figs. 1A and 1B. Alternatively, the electron emission member 14 may be formed into a cone-shape."

> Furthermore, at col. 6, lines 13-15:
> "When being made of diamond having a thin film shape, the electron emission member 14 can be **formed in any shape at any position** by photolithography or the like."

The Applicants respectfully submit that the disclosure of Deguchi does not teach the present invention key element as recited in independent claim 1:

> "... comprises a layer of a first electrically conductive material having a first width and a layer of nanotube emitters having a second

width on top, **said second width being less than 3/4 of said first width;"**

Figure 1A of Deguchi shows the electron emission member 14 on top of the cathode 12 as an illustration. The Applicants failed to find in any place of Deguchi teaching of the width of the electron emission member must be smaller than the width of the cathode, let alone the teaching that "second width being less than 3/4 of said first width".

Moreover, the disclosure at col. 6, line 13 teaches the opposite of the present invention independent claim 1, i.e. in that the electron emission member 14 **can be formed in any shape at any position**. There is no teaching in Deguchi that the second width (of the nanotube emitter) should be less than 3/4 of the first width (of the cathode).

Dependent claims 2-3, 5, 7-9 and 12 depend on independent claim 1, which the Applicants have clearly shown is not anticipated by Deguchi. By the same reasoning, the Applicants respectfully submit that dependent claims 1-3, 5, 7-9 and 12 are likewise not anticipated by Deguchi '091. Particularly, dependent claim 2,

which further recites that the nanotube layer having **a width less than 3/4 and more than 1/4** the width of the cathode layer, is not taught, disclosed or suggested by Deguchi in Fig. 1A.

The rejection of claims 1-3, 5, 7-9 and 12 under 35 USC §102(e) based on Deguchi is respectfully traversed. A reconsideration for allowance of claim 1 is respectfully requested of the Examiner.

Claim Rejections Under 35 USC §103

Claim 6 is rejected under 35 USC §103(a) as being unpatentable over Deguchi '091 in view of Moore '433. It is contended that while Deguchi fails to teach that the layer of a first electrically conductive material is a silver paste, such is disclosed by Moore.

The rejection of claim 6 under 35 USC §103(a) based on Deguchi and Moore is respectfully traversed.

The Applicants have clearly shown that Deguchi does not teach the present invention independent claim 1, which requires a width of the nanotube emitters to be less than 3/4 of the width of the cathode, which is not taught or disclosed by Deguchi.

Claim 6 depends on independent claim 1, and as such, is likewise not taught or disclosed by Deguchi and Moore.

A reconsideration for allowance of claim 6 is respectfully requested of the Examiner.

Claim 10 is rejected under 35 USC §103(a) as being unpatentable over Deguchi '091 in view of Zettl '637.

Claim 11 is rejected under 35 USC §103(a) as being unpatentable over Deguchi '091 in view of Kiyomiya '823.

The rejection of claims 10 and 11 under 35 USC §103(a) based on Deguchi, Zettl and Kiyomiya is respectfully traversed.

Similar to the reasoning present above regarding the Deguchi reference, which the Applicants have clearly shown does not teach the present invention independent claim 1 which requires a width of the nanotube emitters to be less than 3/4 of the width of the cathode, the Applicants respectfully submit that the Zettl reference and the Kiyomiya reference do not add any additional weight in a §103(a) rejection based on Deguchi.

A reconsideration for allowance of claims 10 and 11 is respectfully requested of the Examiner.

Claims 21-24, 26 and 28 are rejected under 35 USC §103(a) as being unpatentable over Deguchi '091 in view of Hidler '502. It is contended that while Deguchi fails to show that the first and second electrically insulating plates are formed of a ceramic material that is substantially transparent, such is shown by Hidler.

The rejection of claims 21-24, 26 and 28 under 35 USC §103(a) based on Deguchi and Hidler is respectfully traversed.

Hidler '502 discloses an electroluminescent display device (ELD) which uses sub-pixel electrodes connecting vias in insulating layers. As disclosed by Hidler, col. 2, lines 51-55:

> "The light emitting layer may be a thin film and it may consist of organic electroluminescent materials. The substrate may be an opaque or transparent material selected from the group of silicon, ceramics, insulated metals and glass."

The Applicants respectfully submit that the ELD is a completely different device utilizing completely different principles and structures than the present invention device of FED. For instance, there is no electron emitter required in an ELD. The principle of operation of an ELD is completely different than that in a FED of the present invention. As such, the Applicants respectfully submit that there can be no motivation to combine the two references, which represent two completely different technological areas, in reaching the present invention independent claim 21.

Moreover, the Applicants cannot find any suggestion in either of the Deguchi or the Hidler references as to the desirability of such modification. In re Brouwer, 37 USPQ 2d 1663(Fed. Cir. 1996). Without such suggestions made in either of the references, the basis for the selection of the references and the purported modification must undoubtedly be hindsight drawn from Applicants' disclosure. In re Oetiker, 24 USPQ 2d 1443 (Fed. Cir. 1992).

The rejection of claims 21-24, 26 and 28 under 35 USC §103(a) based on Deguchi and Hidler is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

Claim 25 is rejected under 35 USC §103(a) as being unpatentable over Deguchi '091 in view of Hidler '502 and further in view of Moore '433. It is contended that Moore teaches that the layer of a first electrically conductive material can be a silver paste because it can be easily printed and formed in various patterns and thereby facilitating production.

The rejection of claim 25 under 35 USC §103(a) based on Deguchi, Hidler and Moore is respectfully traversed.

The Applicants have clearly shown that since the two primary references of Deguchi and Hidler do not teach the key elements of the present invention that the width of the layer of nanotube emitters is less than 3/4 of the width of the cathode, and further that the first and second electrically insulating plates are formed of a ceramic material that is substantially transparent, the Applicants respectfully submit that the additional reference of Moore does not lend any additional weight in a §103(a) rejection. A reconsideration for allowance of claim 25 is respectfully requested of the Examiner.

Claim 27 is rejected under 35 USC §103(a) as being unpatentable over Deguchi '091, Hidler '502 and further in view of Zettl '637. It is contended that Zettl discloses the layer of nanotube emitters formed of a mixture of nanometer dimensioned tubes of carbon, diamond or diamond-like carbon, and a polymeric-based binder in order to retain the nanotubes in the desired location.

The rejection of claim 27 under 35 USC §103(a) based on Deguchi, Hidler and Zettl is respectfully traversed.

Dependent claim 27 depends on independent claim 21, which the Applicants have shown is not rendered obvious under Deguchi and Hidler since at least two key elements in claim 21 are not taught, disclosed or suggested by Deguchi and Hidler. The Applicants respectfully submit that the additional reference of Zettl does not lend any additional weight in a §103(a) rejection. A reconsideration for allowance of claim 27 is respectfully requested of the Examiner.

Based on the foregoing, the Applicants respectfully submit that all of the pending claims, i.e. claims 1-3, 5-12 and 21-28, are now in condition for allowance. Such favorable action by the Examiner at an early date is respectfully solicited.

In the event that the present invention is not in a condition for allowance for any other reasons, the Examiner is respectfully invited to call the Applicants' representative at his

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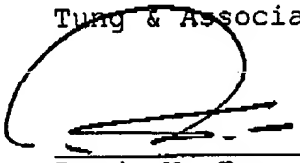
Bloomfield Hills, Michigan office at (248) 540-4040 such that necessary action may be taken to place the application in a condition for allowance.

Respectfully submitted,

Tung & Associates



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